OPTILOGTC OL2109

TECHNICAL REFERENCE / EXACT-MODEL ENGINEERING FILE

OPTILOGTC OL2109 is identified as a eight-point digital output module for the OptiLogic modular I/O platform. The complete marking and installed interface arrangement must be matched together before replacement.

01 Identity and evidence boundary

Complete reference	OL2109
Product type	Eight-Point Digital Output Module
System position	OptiLogic modular I/O platform
Evidence scope	Current PTC documentation lists OL2109 in the supported eight-digital-output family and states addressing and fail-safe behavior.

Output map
Eight digital points use S[slot]:DO[point] addressing for points 0 through 7.

Fail-safe state
The module can drive all outputs off, a configured pattern or the last state.

Fail-safe delay
FS.TIME is set in 0.1-second increments up to 25.5 seconds.

Engineering verification map

Identity decision	Use OL2109 as the complete controlling reference.
Installed position	Record the host or carrier position within OptiLogic modular I/O platform.
Interface evidence	Retain connector orientation, cable ownership, keying and observed indications.
Revision boundary	A similar family name or appearance does not establish interchangeability.
Release evidence	Retain final diagnostics, controlled functional results and open exceptions.

Related portfolio navigation

ABB 1KHL178025R0102P-COM02	Related product page; verify the complete installed model before selection.
ABB 3BHE036290R0005 GDC806 B05	Related product page; verify the complete installed model before selection.
ABB DFC02 DFC-02	Related product page; verify the complete installed model before selection.
ABB DO801 3BSE020510R1	Related product page; verify the complete installed model before selection.

02 System role and interface architecture

OL2109 occupies a defined service position in the OptiLogic modular I/O platform; selection depends on the complete marking and installed boundary.

Identity layer	OL2109
Installed layer	OptiLogic modular I/O platform
Interface layer	Carrier or host position, connectors, cables and configured ownership
Functional layer	Eight-Point Digital Output Module
Acceptance layer	Observed diagnostics and controlled functional result

Application decisions

Installed-system replacement	Compare the exact code, host position and connected interfaces with the removed item.
Planned maintenance	Capture the as-found label, status and configuration before disturbing the installation.
Controlled commissioning	Restore documented connections and prove the intended signal, communication or control response.
Spare qualification	Keep revision, configuration and acceptance evidence with the spare-part record.

Engineering record map

Before removal	During comparison	After commissioning
Complete marking, host position and connector map.	Artwork, keying, revision evidence and included items.	Final diagnostics, controlled result and unresolved exceptions.

Interface validation matrix

Complete marking	Keep OL2109 intact in drawings, service records and quotations.
Physical execution	Compare artwork, connectors, keying and orientation with the removed assembly.
Connected boundary	Trace every cable, terminal or optical path to its documented owner.
Host configuration	Confirm the installed settings or project data that govern the position in OptiLogic modular I/O platform.
Functional result	Prove the intended eight-point digital output module role under an approved test state.

03 Verified technical data

Values below are limited to the exact-model or stated platform evidence used for this product.

Complete order code	OL2109
Equipment role	Eight-Point Digital Output Module
System context	OptiLogic modular I/O platform
Supported module	OL2109
Output points	8
Fail-safe behavior	All off, pattern or last state
Fail-safe delay	Up to 25.5 seconds
Addressing	S<slot>:DO<point>, points 0-7
Output use	On/off loads including lights, motors and solenoids
Point access	Boolean read/write
Packed access	Byte, Word, Short, DWord or Long at offset 0
Fail-safe type address	S[slot]:FS.TYPE

Engineering interpretation

Complete identity	Use OL2109 as one complete reference; do not approve a shortened family name.
Physical comparison	Compare artwork, connector count, keying and installed orientation with the removed item.
System comparison	Confirm the documented position and interface ownership within OptiLogic modular I/O platform.
Evidence limit	Current PTC documentation lists OL2109 in the supported eight-digital-output family and states addressing and fail-safe behavior.

Engineering questions

How should OL2109 be identified before a replacement is approved?	Compare every token in the complete marking, installed position and documented eight-point digital output module role. Confirm the physical label before approval.
What evidence should be retained before removing OL2109?	Record the mounting position, connected interfaces, status indications and current OptiLogic modular I/O platform configuration. Photograph the complete label before disconnection.
How should the interfaces for OL2109 be checked during installation?	Map each connector, terminal and cable to the as-found record and applicable manufacturer documentation. Preserve keying and shielding arrangements.

04 Configuration and diagnostic logic

Fail-safe pattern address	S[slot]:FS0.PATTERN
Fail-safe time address	S[slot]:FS.TIME
Fail-safe commit address	S[slot]:FS.SET
Delay resolution	0.1 second
Delay range	0 to 25.5 seconds

Inactive state	Confirm every output remains in the approved safe state before enabling loads.
Single-point test	Command one approved point at a time and compare indication with the field response.
Fail-safe test	Prove the configured communication-loss behavior without exposing the process to an unsafe state.
Load-path result	Record module indication, field voltage/current condition and actuator response together.

Release decision matrix

Approve identity?	Only after the complete OL2109 marking and execution match the approved reference.
Approve physical fit?	Only after artwork, keying, connectors and host position match the installed boundary.
Approve configuration?	Only after interface ownership and applicable project or hardware settings are restored.
Approve service return?	Only after diagnostics and the intended controlled-system function pass the approved test.

As-left evidence

Identity record OL2109 marking and installed position.	**Interface record** Restored connector, cable and configuration ownership.	**Acceptance record** Observed diagnostics and approved functional result.

Close-out control

Identity closed	The as-left record names OL2109 without a shortened family reference.
Interfaces closed	Every restored connection is traceable to the pre-work record.
Function closed	The intended eight-point digital output module role has a recorded controlled-test result.

05 Evidence, decisions and navigation

Evidence scope	Current PTC documentation lists OL2109 in the supported eight-digital-output family and states addressing and fail-safe behavior.
Installation boundary	The exact installed carrier, terminals, cables and project configuration remain site-specific.
Technical reference	PTC Kepware Optimation OptiLogic driver documentation

Engineering FAQ

How can a suspected OL2109 fault be separated from wiring or carrier faults?	Verify supply and reference conditions, then inspect mating hardware and external wiring. Use controlled substitution only after both signal paths are documented.
What should be verified after fitting OL2109?	Confirm normal indications, communication or signal continuity and the intended controlled-system response under an approved test state.
Can OL2109 be replaced by a similar-looking assembly?	No direct equivalence is established by appearance. Compare the complete code, revision, interface execution and installed configuration.

Source identity

PTC Kepware Optimation OptiLogic driver documentation

Related product references

ABB SCYC51220-63901075	Related product page; verify the complete installed model before selection.
Hirschmann M4-FAST-8-SFP	Related product page; verify the complete installed model before selection.
Hirschmann M-FAST SFP-MM/LC	Related product page; verify the complete installed model before selection.
General Electric DS200IMCPG1CGC	Related product page; verify the complete installed model before selection.
Bently Nevada 3300/47	Related product page; verify the complete installed model before selection.

Discuss the complete OL2109 marking and installed configuration.
sales13@apterpower.com | +86 18030235313
Scan the WhatsApp QR to share nameplate and installed-system evidence.